

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



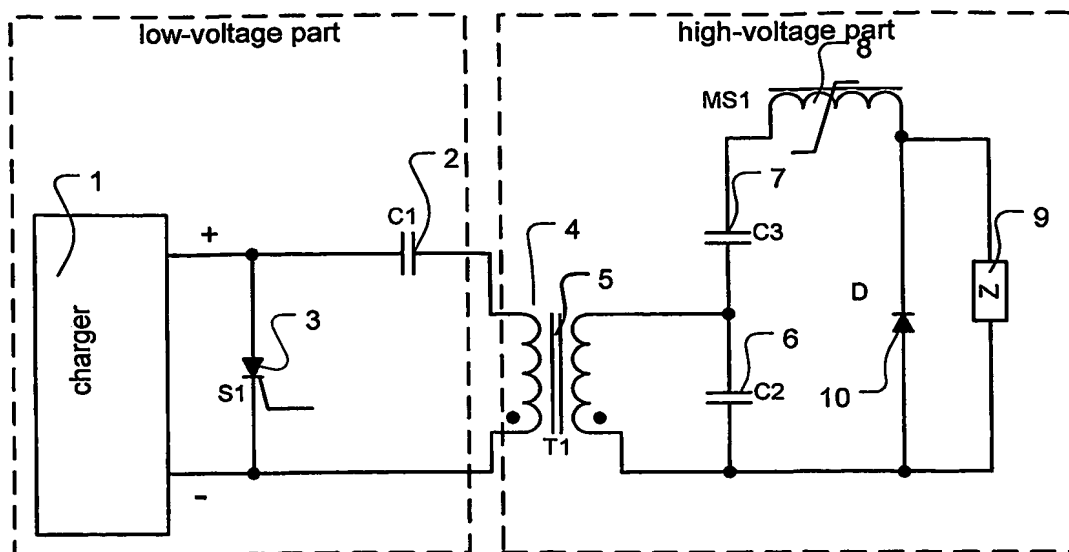
(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/109915 A1**

- (51) International Patent Classification<sup>7</sup>: **H03K 3/57** (74) Agent: KLEIN, David; Beit HaRof'im, 18 Menuha VeNahala Street, Room 27, 76209 Rehovot (IL).
- (21) International Application Number: PCT/IL2004/000488 (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (22) International Filing Date: 9 June 2004 (09.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/476,853 9 June 2003 (09.06.2003) US (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (71) Applicant (for all designated States except US): SOREQ NUCLEAR RESEARCH CENTER [IL/IL]; Nahal Soreq, 81800 Yavne (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WOLF, Miki [IL/IL]; 13/18 Elazar Friedman Street, 49444 Petah Tikva (IL). POKRYVAILO, Alex [IL/IL]; PO Box 228, 76805 Tal Shachar (IL). YANKELEVICH, Yefim [IL/IL]; 48/5 Ben Zion Avenue, 76410 Rehovot (IL). ABRAMZON, Eli [IL/IL]; 147/19 Shaul HaMelech Street, 84760 Beer Sheva (IL).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HIGH VOLTAGE MAGNETIC COMPRESSION MODULATOR



(57) Abstract: A high voltage magnetic compression modulator including a low-voltage part including an energy source connected to a primary winding of a pulsed transformer, and a high-voltage part including a secondary winding of the pulsed transformer connected to a capacitor, the capacitor being connected to a magnetic switch, the magnetic switch being connected to a load, characterized in that a unidirectional low-impedance path for the charge of the capacitor is connected in parallel to the load.